# FOREIGN AGRICULTURE

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East German Agriculture

A Shipper and Carrier Look at Refrigerated Containers

Foreign Agricultural Service
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This week's cover:

Greek workers handpick cotton grown under irrigation in the Compais valley. Rain and cold weather during harvest reduced Greece's cotton output substantially last season, requiring imports of some 25,000 bales of U.S. cotton during the 1972–73 marketing year—a fourfold rise over the previous year. Normally, Greek output adequately supplies the growing yarn industry, leaving about half of the crop for export. See article beginning on page 10.


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*East German dairy cows (top) await milking in a modern barn with automatic milking machines. Potatoes are harvested (above) at a production cooperative near Eisenhüttenstadt.*

# Changing Face of East German Agriculture—Shift From Grain to Livestock May Benefit U.S. Sales

By ROGER E. NEETZ

*Assistant U.S. Agricultural Attaché*
*Bonn*

Collectivized agriculture in East Germany—the Deutsche Demokratische Republik (DDR)—may be shifting from its former emphasis on grain cultivation to intensive production of livestock, a trend that may prove significant for U.S. sales of feedgrains and supplementary feeds. Although the United States does not officially recognize East Germany, the new U.S. trade thrust to Eastern Europe and the weakened ability of the USSR to supply grain may improve the U.S. position in this expanding market.

Agriculture today in East Germany—a nation of 17 million—is largely State-controlled. Private lands and capital resources have been reorganized into State and collective farms.

Although State controls affect collective farms to some extent, livestock is privately owned on 2,664 East German collectives managing 1.6 million acres. Also, some 988,400 acres of agricultural land are still privately and church owned. These two sectors comprise about 16 percent of land in agriculture.

One consequence of collectivization has been a sharp decrease in the number of farms and a subsequent increase in farm size. Most recent data indicate that State farms in 1971 averaged 2,189 acres and collective farms 1,500 acres.

East Germany's agricultural sector contributes about 10.7 percent of the net national income, a decrease from the 28.4-percent share noted for 1950. East Germany is thus following the path taken by all industrialized nations, with a resulting rapid outflow of people from the land.

Farming currently employs about 985,000 people and represents about 12.6 percent of total employment.

Under East Germany's planned economy, grain area on collective and State farms declined to 2,321,000 acres in 1971, from a prewar base of 3,150,000 acres, according to official data. Average grain area for the 5-year period, 1966–70, trended slightly upward, increasing 0.4 percent annually. During the same period, annual production grew an average of 2.6 percent a year.

The postwar decrease in grain area occurred mainly in the sandy soils of North Germany—marginal and low-yielding areas—where grain has been largely replaced by forage crops and alfalfa.

Paralleling this shift in cropping patterns is the progressive growth of the livestock sector, which in 1970 contributed about 72 percent of the total gross farm output—a level comparable to West Germany.

For 1972, cattle numbers are reported to be 1.6 percent higher than the previous year and hogs increased by 3.7 percent, suggesting that consumption of feed continued upward last year.

Livestock census data indicate that cattle numbers in 1971 reached 5,292,000 head; hogs, 9,995,000 head; and poultry, 43,342,000. Compared with 1970, this represented a 2.7-percent gain for cattle, 3.2 percent for hogs, and about 1.0 percent for poultry.

Long-term, the livestock sector during 1960–71 shows more modest growth. The average annual rate of increase during this period was 1.1 percent for cattle, 1.67 percent for hogs, and 1.43 percent for poultry. Growth would have been more rapid if sharp declines in numbers had not followed the collectivization of the early sixties. The livestock sector did not restabilize until about 1964.

Growth in livestock numbers is substantiated by livestock density ratios showing a rise in cattle numbers from an average 28.6 head in 1961 to 34 head in 1971 per 100 acres of agricultural land. Hog numbers rose from 55.8 head in 1961 to 64.3 head per 100 acres, and poultry expanded from 144.2 birds to 160.3 for these years.

East Germany's plans to develop a viable agricultural sector suggest that livestock numbers will continue to in-

*Grain is harvested near Zossen. In recent years, East German grain output has fallen short of livestock industry needs.*

crease, resulting in higher cereal usage. Under present programs, grain and forage yields are climbing steadily—in contrast to the minimal gains in acreage—and future plans call for a continuation of this trend.

In spite of attempts to disparage market capitalism, price is still an important incentive in promoting livestock production. The private market is virtually nonexistent and sales of most livestock and livestock products are conducted through the State procurement agency, which contracts with farms and organizations for the purchase and delivery of products. Official prices are fixed on the basis of slaughter weight and quality.

Considering that feed costs are the largest input cost of the livestock sector, a comparison of price relationships between livestock and wheat suggests that a lower priority has been given to input costs and a higher priority to livestock prices as a stimulus for increasing livestock production.

East Germany's livestock-grain ratio improved markedly during 1966–70 during the period when emphasis in all East European countries was on livestock production. There is no assurance that this ratio will change in the future. Moreover, root crops—including potatoes—still constitute an important and inexpensive hog feed.

Planned procurement prices show that the price of slaughtered cattle in 1971 was 12 times higher than wheat prices, compared with 9 times higher than wheat in 1960.

Slaughtered hog prices were 13 times wheat prices in 1971 and 11 times more in 1960. Only poultry prices fell—they were 13 times higher than wheat prices in 1971, compared with 16 times higher in 1960.

Over the years, however, the strengthened livestock industry has effected a rise in East German per capita consumption of meat and poultry products. Consumption now equals most West European countries.

One evidence of emphasis on livestock production is a recently published mixed-feed-industry report. Findings show that the 112 mixed feed plants produced 3.2 million tons of mixed feeds in 1972—double the production reported in 1965. Feed processing plants used about 2.2 million tons of grain, supplemented with soybeans, peanut meal, fish meal, and miscellaneous minerals and vitamins.

In 1972, only about 60 percent of East Germany's total feed needs were met by domestic production. According to preliminary estimates, grain consumed for feed climbed from an average of 4.6 million tons in 1961–65 to 5.7 million tons in 1966–70—a 24-percent gain.

On the other hand, domestic grain production for the same periods shows only a 15.5-percent rise, averaging about 5.8 million tons annually during 1961–65 and 6.7 million tons during 1966–70.

Consequently, feedgrain imports have assumed increasing importance to support the flourishing livestock program. In the past, the USSR has been the primary supplier of grain to East Germany. Recent Soviet shortages have decreased this share, and the United States is emerging as a major supplier. Direct U.S. grain sales totaled 475,000 metric tons in 1947–48, 316,000 tons in 1968–69, 404,000 in 1969–70, 195,000 in 1970–71, and an estimated 327,000 tons in 1971–72.

At present East Germany is bidding to extend its meager trade with the West now that it is recognized by some 35 nations, including Britain, France, and Italy. Of the major industrial nations, only the United States and Japan do not recognize the DDR.

Two-way trade between the U.S. and the DDR totaled $77 million in 1971 and was even less last year. However, the growing need for U.S. grains may serve as a springboard to future trade growth.

East Germany enjoys a special trade advantage—interzonal trade—with the Federal Republic of Germany (FRG) permitting trade to develop between the two Germanys during the period of nonrecognition.

In 1971, East German imports from the FRG amounted to $720 million, with exports to the FRG totaling $673 million. The share of agricultural products was 20 percent for imports and 15 percent for exports.

West German exports to the DDR in 1972 also included about 600,000 tons of soybean meal, very largely from U.S. beans. A recent FRG report on interzonal trade developments indicates that oilcake and meal sales in 1972 amounted to about $64 million. West German analysts attribute the development of this trade to the strong expansion of the livestock sector under State-control in the DDR.

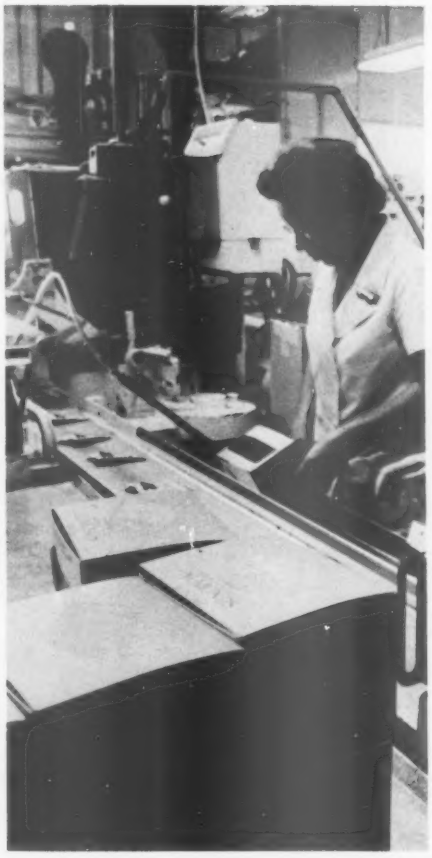
# U.S. Almond Exports To Expand

By JACK AXER

*Vice President, Export Sales*
*California Almond Growers Exchange*

### '73 Almond Crop Hurt

Prospects dim for 1973 crops in major almond producing countries. Italy and Spain were hit by unusually late snowfalls and severe cold, while U.S. producers have suffered heavy rains and cool weather. Although still early for forecasts, buyers may face another year of tight almond supplies.



WORLDWIDE ACCEPTANCE of California almonds and almond products in the past 10 years in addition to increased consumption in the United States have brought about tremendous expansion and development within the almond industry. This growth in exports and domestic use are projected to continue in the seventies.

By 1975, the present acreage planted to almond trees in California is expected to yield a crop of 250 million shelled pounds, more than threefold the current rate of annual consumption in the United States. Domestic consumption by 1975 is projected at 100 million pounds, shelled basis, or 25 percent more than the present level. With this rather generous, and perhaps optimistic, allotment to the home market, the almond industry must export the remaining 150 million pounds or 60 percent of the crop. Based on the industry's experience in the export market to date this appears a realistic assignment, especially in view of several recent developments.

First, Italy, for many years the world's leading almond producer, has dropped to third place in the last 3 years with California and Spain now far in the lead. Italy's decline has been attributed to a combination of bad weather, a shortage of labor, and the inability to mechanize harvesting and shelling on a large scale.

Second, consumption of almonds in Italy and in Spain, too, has increased sharply since 1965, thus substantially reducing the supply available for export.

The third important development has been a breakthrough in U.S. trade with the Eastern European countries. The industry was successful in introducing almonds and almond products to Russia in 1967. Shipments to Czechoslovakia and Yugoslavia followed, then to East Germany, Poland, and Bulgaria. Only Hungary, Romania, and Albania are not almond customers at present.

But the most important factor for the industry is the worldwide favorable acceptance of its products. At present a total of 91 sales agents sell almond products to 56 foreign countries. The sales office in Tokyo, Japan, for example, estimates that potential Japanese consumption is at least half that of the United States.

Eventually, the industry expects to sell almonds to People's Republic of China, India, Pakistan, Indonesia, and a number of the African nations. Meanwhile, the California almond industry must be able to maintain a continuity of supply to each of its established markets and to take advantage of the maximum potential almond consumption by having adequate supplies to meet seasonal demands.

Although in most markets there is a certain demand for almonds throughout the year, the major demand is in the last 3 months of the calendar year. This large seasonal trade requirement is helpful, of course, in that it places a special emphasis on almonds along with other tree nuts during the fall months. However, to meet the full demand there must be a substantial carryover of 40–50 million shelled pounds from the preceding crop, since sufficient tonnage simply cannot be processed and delivered early enough in the fall from the current crop to provide a ready supply to meet all requirements.

*(Continued on page 16)*

*Left, almond packets pour off assembly lines at Exchange plant for U.S. marketing and world outlets. Below, sorters inspect almond kernels as they move along a stepped belt which tumbles before each person, exposing all surfaces of the product. Each belt carries a different size kernel.*

## ALMOND EXPORT SALES [1]

[In millions of shelled pounds]

| Destination | Shipments | |
|---|---|---|
| | 1971 | 1975 projection |
| Belgium | 2.4 | 3.0 |
| France | 6.6 | 10.0 |
| Italy | 1.6 | 5.0 |
| Netherlands | 4.2 | 7.0 |
| West Germany | 27.4 | 35.0 |
| Total | 42.2 | 60.0 |
| United Kingdom | 9.3 | 14.8 |
| Ireland | .2 | .2 |
| Denmark | 1.1 | 2.0 |
| Total | 10.6 | 17.0 |
| Norway | 2.8 | 3.5 |
| Sweden | 6.1 | 8.0 |
| Finland | .9 | 1.5 |
| Total | 9.8 | 13.0 |
| Russia | 1.77 | 6.0 |
| Czechoslovakia | .26 | 1.0 |
| East Germany | .20 | 2.0 |
| Bulgaria | .20 | .3 |
| Yugoslavia | .15 | .4 |
| Poland | .05 | .3 |
| Total Eastern Europe | 2.63 | 10.0 |
| Austria | 1.19 | 2.0 |
| Switzerland | 3.71 | 5.0 |
| Other European countries | .07 | 1.0 |
| Total | 4.97 | 8.0 |
| Total Europe | 70.20 | 108.0 |
| Japan | 13.00 | 30.0 |
| Other Asian countries | .32 | 1.0 |
| Australia, New Zealand | 1.90 | 3.0 |
| Canada, Mexico | 5.10 | 6.0 |
| Latin America | .93 | 2.0 |
| Africa | .45 | 1.5 |
| Middle East | .20 | .5 |
| Total | 21.90 | 44.0 |
| Total export | 92.10 | 152.0 |

[1] Based on deliveries in 12-month period ending June 30, 1972.

Source: Almond Control Board.

# Beef Exports to U.S. Brighten British Honduran Future

By JOHN C. McDONALD
*U.S. Agricultural Attaché*
*Guatemala City*

IN MID-FEBRUARY 1973, a criollo steer—a native breed—won the distinction of being the first animal in recorded British Honduran history to be slaughtered for beef for export to the United States. In all, some 5,000 head will be killed for export this year—plus 4,000 more, if they can be imported.

In the opinion of the Belizeans, as the citizens call themselves, authorization to export beef to the United States was a shot-in-the-arm needed by their livestock and meat industries to attract firm commitments from a multitude of interested but cautious investors.

A supply of live cattle is the principal problem to be solved if the new endeavor is to become a major source of foreign exchange, like sugar and citrus products. To build up beef cattle herds, British Honduras imported 64 head of U.S. Charolais cattle in 1972, and 48 head of U.S. Brahmans in 1971.

There are scattered indications that better days lie ahead for the livestock industry and for other agribusinesses in the little commonwealth of 130,000 inhabitants. Among them are these:

- With a trade deficit of about $15 million a year, prospects for change exist. Meat, sugar, and citrus income are on the way up, and British Honduras has been admitted to the Caribbean Free Trade Association on very generous terms.
- The country's basic sugar quota granted by the United States was nearly tripled by 1971 legislation, effected in 1972, and mill capacity is being expanded. A British-owned sugar company has 1,500 purebreds and improved grade cattle that are being increased in number.
- An American shipping magnate, who operates "the world's largest agricultural project" on 3.7 million acres of land in Brazil, is said to be preparing to raise cattle on his holdings in British Honduras.
- Another American industrialist presently is clearing thousands of acres for production of tropical fruits and livestock.
- An American father-and-son team expects to produce 12 million pounds of rice this year on 3,750 irrigated acres. They also have a beef herd which will be enlarged.
- Both of the country's fruit processing plants will be producing frozen concentrates for export this year.

With the lowest population density in Central America, British Honduras has plenty of room for both agriculture and people. A British colony since 1840, it governs itself internally while the United Kingdom retains responsibility for foreign affairs and defense. Principal natural resources are forests, some 2 million acres of agricultural land, and a combination of natural factors that may be translated into a first-rate tourist industry.

Sugar and citrus products account for some three-fourths of the value of agricultural exports. Ten years ago, when a wholly-owned British company acquired the country's single mill, sugar production was only 28,000 long tons; last year it was 72,000 tons.

The existing mill has been enlarged and a second mill built large enough to accommodate a future capacity of 100,000 tons. This year the new mill's maximum will be increased from 30,000 to 40,000 tons. A reserve stock of about 10,000 tons is maintained at all times to answer requests from the most valued customer, the United States.

According to an industry spokesman, the country could produce 200,000 to 300,000 tons a year without difficulty.

The sugar company also feeds 1,500 head of Charbray and upgraded criollos on 3,000 acres of land, 900 of it in improved pasture. The herd will be increased to 2,000 head and the stock area to 4,000 acres. If livestock and meat prices have improved when these objectives are reached, expansion will continue.

Citrus and its products earn the second largest foreign income for British Honduras. There are two processing companies, one of them owned by Canadian-American interests and the other by Jamaicans.

Last year's production of 1.3 million boxes of oranges and grapefruit could be doubled, says the Citrus Growers Association, but marketing is difficult. Brazil is a tenacious competitor on price, and British Honduras stays in the market mainly on the strength of superior quality, according to the Association.

ONE COMPANY produces orange and grapefruit concentrates for export (small growers supply fresh fruit and canned juice to the domestic market), and the other has specialized until now in grapefruit sections and straight juices. But with some of last season's orange output slow to move, the latter firm is switching the bulk of its crop this year to production of concentrate. In 1971, British Honduras exported 1.9 million gallons of orange juice concentrate to the United States.

An American father-and-son team are fashioning an integrated rice operation which is impressive indeed. Integration begins with buying office supplies, seed and fertilizer, and continues through their own parts depot, repair shops, fleets of trucks, tractors, earth movers, combines, and processing mill, to the final step of packing polished rice in 1-pound bags and shipping it in their own boats to Honduras and in charters to Jamaica.

To date, 7,000 acres have been cleared, of which slightly more than half are under cultivation. Some, unsuited for rice, have been improved for pasture or planted to sorghum to feed 750 beef cattle. River water is lifted 30 feet by pumps and currently is flowing 24 hours a day through irrigation ditches and into paddies.

The operation began in 1963 with land purchased near Belize City. The owners began planting dryland rice a year later and switched to irrigation in 1967. They plant U.S. rice varieties to obtain export quality. Last year, they furnished 6 million pounds of rice for domestic consumption and exported the balance to Jamaica. The current crop should yield 12 million pounds for domestic use and export.

Eventually, they will have up to

*(Continued on page 16)*

# REFRIGERATED CONTAINERS: A Shipper Outlines Experience

By BERNARD MAYRSOHN
*Prevor-Mayrsohn International*

BEFORE CONTAINERIZATION, U.S. fresh fruits and produce were shipped in break bulk (loaded in the refrigerated or ventilated hold of a ship), either inside or outside the ship's refrigeration. Owing to heavy spoilage, exports had to be limited to hardware items, such as apples, potatoes, onions, citrus, sometimes pears, and some grapes; and losses from pilferage were inevitable.

Spoilage was due to extra pier handling during loading and unloading here and abroad, and to changes in the temperature of the product after it was brought to piers and unloaded and while awaiting its turn to go into steamship coolers. At every pier, spilled apples, onions, or oranges could be seen at shipping time. Pilferage could happen at any time before or during the voyage.

The risks of break-bulk shipments were great, as were the losses. Shippers demanded letters of credit or prepayment from even their best buyers. These prudent buyers minimized their needs and their orders. Needless to say, all these factors discouraged the export of fresh fruits and vegetables.

The early containers were an immediate remedy to many of these problems. Pilferage and broken packages were eliminated. But these early models, while helpful and promising, still had their problems, and did not reduce shippers' costs.

There still was some internal breakage, even in the containers. While shippers had the advantage of doing their own loading, they had inadequate tailgate bracing to keep the load secure, and were inexperienced in proper loading techniques.

Performance of the early containers was often spotty. Refrigeration equipment was poor and often did not function properly during the voyage. Poor air circulation did not evenly distribute the little cold air that was provided. Insulation was not good enough, and temperature differences could be noted inside when it was hot or very cold outside.

Also, the early containers did not usually refrigerate during trucking from shipping station to pier. At times the pier's receiving clerks were slow in getting loads plugged in and refrigeration started.

There were only a few container shipping ports, in this country and abroad. Because of the great distances from most shipping stations to piers, shippers had no savings on inland freight charges. Closeness of the ports is vital to exporters, who constantly ask steamship companies to open ports near their shipping points and who are always gratified when new ports are available to them.

With the early containers, there were few ports that encouraged shippers to mix in one container several different fruits or vegetable items that required the same temperature. When buyers were not ready to buy full loads, terminal markets like Hunts Point in New York permitted these compatible mixtures.

With such mixed loads, foreign buyers requested that containers be loaded at shippers' facilities in such a way that purchases could be offloaded in the proper order at several places upon arrival. This not only minimized handling but enabled the containers to

*Above, first of a shipload of refrigerated containers. Bottom, corner fittings are locked into deck; taut cables run from top corner fittings to hatch covers. Left, "reefers" at marine terminal await towing to crane in rear for transfer to ship.*

**Based on remarks at first conference on assessment of technology (AsTec), for refrigerated containers, sponsored by Maritime Administration and held in Washington, D.C., February 1, 1973.**

be used during the trip as trucking and cold storage in the tropics and as trucking and heating in Scandinavian winters. Even today, mixing loads is important to foreign buyers.

During the past 10 years, improvements have gradually been made. Many refrigeration experts have worked on improving quality and performance and are still working intensively on air circulation, the value and perfection of controlled atmosphere, and humidity control.

Exporters have developed improvements in arranging and stacking inside containers to maximize air circulation. At the same time, the loads are braced to avoid shifting en route. This tends to refrigerate the load evenly throughout the container. Tailgate bracing facilities are now available to load quickly, securely, and economically.

FULL CONTAINER loads of a single item promise to lead to greater volume shipments. The following developments have encouraged this promising trend:

- More container ports near shipping sections. This reduces inland freight charges and time, resulting in faster arrivals to ports, with better quality and cheaper costs.
- Uniform loading of a single product, which affords optimum temperature. Individual treatment can give the item what it needs—icing for leafy products, gas for products such as tomatoes, which need ripening, or controlled atmosphere which would tend to put a ripened product to sleep so that it would arrive in prime condition.

In the fresh fruit and produce business, no two seasons are alike. Exports are influenced by weather, labor, size and quality of crops, size of product, currency conditions, and import restrictions imposed by foreign governments—either by higher duties, or by actual limitation of import amounts, or by arrival or termination dates—together with preferred treatment for Common Market countries.

Among the variable factors are political conditions. Several years ago, the civil conflict in Cyprus affected the normal shipping of spring carrots to the United Kingdom and Europe. Our firm received a call from London asking if there were any carrots in the United States. It happened that Texas had such a bumper crop of excellent-quality carrots that they could not all be sold. Many were left unharvested and many were consigned unsold to the New York market. The firm quickly satisfied the U.K. and European demand, and at the same time satisfied the Texas growers. It also established an ongoing market for U.S. carrots on European markets which all U.S. exporters have enjoyed ever since.

Shippers must be alert to all possibilities. Late in January, heavy snows and cold temperatures seriously damaged the early spring crops of citrus and many vegetables in eastern Mediterranean countries. This affected U.S. shipments to their markets in Europe.

New York is in the center of this activity worldwide, since many items from the Western Hemisphere now end up in Europe. Almost all important foreign buyers now check New York for offers before deciding where to place their orders.

This country has more modern mechanized harvesting, grading, packing, and shipping facilities than most producing countries of the world. With its mass production efficiencies, it can often bring its products into foreign markets at prices lower than those of locally grown items.

This is especially true when U.S. crops are at their production peaks. Usually this is when the quality and the condition of the product are at their best. Often during these periods of heavy production prices are so low that growers do not get back their harvest costs. It is at those times particularly that U.S. exporters have to seek sales in foreign countries, even in the face of domestic production there.

Crops in the United States generally have a longer growing and harvesting period than those in most other producing areas, because plantings are staggered. This makes it practical for U.S. growers and shippers to purchase more modern and expensive grading and packing equipment, resulting in greater cost effectiveness. Growers in the United States can be proud of their production results; the U.S. housewife has to spend less of her disposable dollar on food than the European housewife does, while at the same time her family eats better and has a wider selection of foods available.

Fresh fruits and produce account for more of the European food bill than of the American food bill. It seems that Europeans and Japanese like fresh produce and fruits better than Americans do, for they buy more of them and will spend more for them than Americans.

Not only can U.S. exporters find new markets and new dollars through exexporting perishables, but they can aid U.S. fruit and vegetable growers by overseas marketings of their surplus crops at peak production. This enables the growers to utilize their facilities and labor better and to market their entire crop, not just a part of it.

Exporters in the United States are constantly looking for new possibilities. Hardly a week goes by that some foreign buyer does not ask for price or supply information. Their interest can range from cherry tomatoes to red peppers, from strawberries to fresh limes, through the whole product spectrum.

Both exporters and importers know their future profit depends on the price and the quality of the produce they deal in. The U.S. shipper, to further his competitive advantage and reduce his prices, could well use the following:

- More and faster container ships, departing from more U.S. ports—hopefully near producing areas—and arriving at more foreign ports of call.
- More and improved refrigerated containers trucked to all packing stations. This means that the experienced handlers and loaders at the packing stations can "airstack" the loads—using the proper loading pattern to provide passages within the container that will give the proper air distribution. Having containers at the packinghouses keeps products under constant refrigeration, from precooling chambers into precooled transportation.
- U.S. inspections made at the shipping station when the container is being loaded, before the doors are sealed. Inspection certificates would reveal exactly what is inside, and recording machines would record changes in temperatures en route.
- Some governmental help—protection against unfair foreign restrictions; assistance in enabling exporters to continue taking advantage of the lower dollar value relative to foreign currencies; and introductions to buyers for the State trading organizations of Eastern Europe, the USSR, and perhaps the People's Republic of China. Shippers in the United States already know how to contact any buyer in the Free World, are alert and active to sell, and will gladly encourage any buyer who so much as raises his head to ask for an offer.

# REFRIGERATED CONTAINERS: A Carrier Describes Problems

By JAMES L. CLARK
*Sea-Land Service, Inc.*

SINCE THE advent of containerized shipment of perishable commodities 16 to 18 years ago, there have been three distinct phases of problem areas and accomplishments. They all have to do with increased geographical services offered by container operators.

During Phase I—1958 to 1963—ocean transit times for the movement of perishable commodities by container very seldom exceeded 5 to 7 days. Similar transit times had been experienced domestically by motor and rail carriers for a number of years, so it was only right to consider that road-type mechanical refrigeration equipment would do.

Therefore, carriers during those years bought typical highway-transport refrigeration equipment, with minor exterior modifications to combat the corrosive action of salt spray. By the time these refrigeration units were 2 to 3 years old, it was evident that the corrosion problem was not only exterior but also reached into the component interior parts of the units themselves. Failures were numerous and maintenance costs were astronomical. It was clear that a completely marine-type refrigeration unit had to be designed and built from the ground up.

During Phase II—1963 to 1966—the first of the truly marine-type refrigeration units came into service, and many older units were phased out and replaced by the new types. Also during this period, improvements were made by the manufacturers in insulating materials, and the industry moved from containers insulated with fiberglass and walled with plywood to the containers insulated with polyurethane foamed in place and walled with fiberglass that are still in use today. Transit times during this period increased to between 12 and 14 days. However, the more reliable refrigeration units and the better insulated containers allowed satisfactory delivery of the commodities handled with few failures.

At the beginning of Phase III—1966 to the present—the true "container revolution" broke loose. Scheduled container service was offered between the United States on the one hand and both Europe and the Far East on the other. Today, container operations link most of the countries of the world.

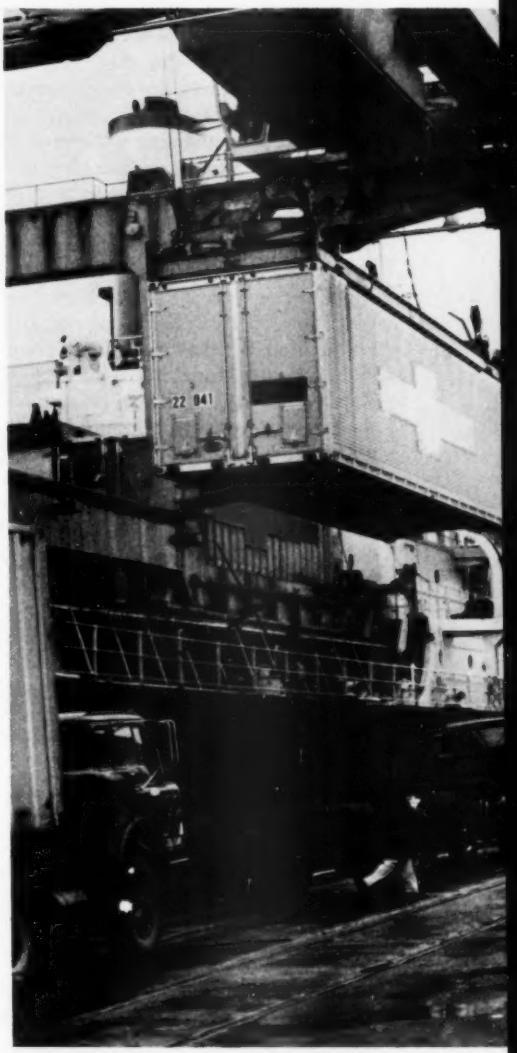
Transit times were drastically increased; it was (and is) not uncommon to see perishable commodities moving on ocean voyages exceeding 30 days.

A whole new list of major challenges now arose. Excessive component failures in the refrigeration units themselves reared their ugly heads again. For sensitive fruits and vegetables, other than frozen and "hardy chill" commodities, the heat buildup became so high that the air circulation supplied was not giving enough product management for the lengthly transit times involved. Consequently, on some of these very long trips, the range of product temperatures within a load would be excessive.

For its part, Sea-Land attacked these problems by setting up a research and development department in early 1968, as part of its engineering department. Work was immediately begun with the Transportation Research and Facilities Group of USDA and with the manufacturers of refrigerated containers.

Two objectives were stressed: Fail-safe operation and improved performance over longer routes. Some examples of accomplishments through this R&D effort:

- Improvements in existing units through retrofit programs. An all-electronic thermostat has been developed, for increased reliability, less maintenance, and more accurate temperature control. A removable electrical tray for the control circuit has been devised, so that if anything goes wrong in this area, the whole refrigeration unit can be put back into service immediately by substituting another tray. Control circuits have been improved to the point where there are only one-fifth as many failures as in the past. Clutch failure—a major problem area—has been considerably reduced through working with distributors of this part and manufacturers of refrigeration units. Defrosting capability—particularly important for fresh fruits and vegetables—has been notably improved.
- Development of a new refrigera-



*In earlier days of containerization, ships' cranes loaded and unloaded containers. Now, most containers are handled by dock cranes* *(see p. 7).*

**Based on remarks at first conference on assessment of technology (AsTec), for refrigerated containers, sponsored by Maritime Administration and held in Washington, D.C., February 1, 1973.**

tion unit. A new generation of refrigeration units is now appearing. In addition to incorporating capacity modulation (automatic reduction of the unit's cold-producing capacity at a given temperature above the freeze point of the load, to prevent the freezing of cold-sensitive products) and constant air flow (with or without refrigeration), these units promise to furnish increased component reliability. Each component has been thoroughly tested, evaluated, and chosen to fulfill its particular function.

Yet there are three major problems areas that carriers—as well as exporters or potential exporters—still face today. These are air circulation, container contents, and transit time.

**Air circulation.** On this very important point, there are more theories than there are firm data. It may be that instead of spending years of time and effort to come up with an all-round panacea, the industry should aim its major efforts toward devising improvements that can be installed in existing containers through retrofit programs. In U.S. flag carriers alone, there are now some 15,000 refrigerated containers in use—perhaps twice that many if foreign flag operators also are taken into consideration. These units have for the most part been purchased in the past 3 or 4 years and their useful life is 7 to 10 years. They will not simply go away.

**The load itself.** The carrier is responsible for the contents of the container only after they are loaded and while they are in his possession. He has little or no control over product quality, packaging, precooling, and loading practices; yet these factors are basic contributors to good or poor outturn.

IN THE AREA of product quality, nothing but the finest grade of product ought to be considered for shipment. In many instances, produce received for overseas shipment is actually garbage before it is shipped. This point must be emphasized, for no matter how carefully the cargo is handled throughout its transit, if it is poor quality to begin with, it can only be poor quality at outturn.

In the area of packaging, much research and development has been going on recently, and much improvement has already been made. Shippers must, however, continue to think in terms of packages that facilitate temperature management through proper air circulation, as well as protecting the product itself from injury by bruising or compression, under severe stacking conditions, and during the rolling and pitching of a sea voyage. To save 15 or 20 cents per package and deliver inferior goods to a customer is false economy.

In the area of precooling, considerable progress has been made toward convincing exporters that the container is not designed as a precooling chamber, but rather as a traveling cold-storage warehouse. Perishable commodities should be cooled down to carrying temperature before they are loaded into a container. Otherwise, in an attempt to pull the field heat out of the product, the refrigeration unit will actually chill or freeze some of the cargo—particularly around the outside perimeter of the load. This problem still exists all too frequently.

In the area of loading, the practice must vary with the product. Many perishable commodities, such as frozen foods, should be loaded in one solid mass, only leaving room for air to circulate around the entire mass. Most sensitive commodities, such as fresh fruits and vegetables, can be loaded in this manner if transit times of only a couple of days are involved.

However, in loading perishables that generate heat in their ripening processes, maximum attention has to be given to loading patterns. Ideally, of course, these commodities should be loaded so that the circulating air would surround each individual fruit or vegetable. This is not possible, but air-flow loading of individual packages surely is; and it must be provided.

**Transit time.** As the container revolution spreads across the seas, ocean journeys have become longer and longer. Thus, the length of the trip has become an even more serious problem, putting still more strain on refrigeration capacities.

The use of modern fast container ships greatly reduces the duration of the sea leg and, in proportion, the risk of refrigeration breakdown. Sea-Land's new SL–7 ships, for example, have speed capabilities up to 33 knots. With the new speed, these vessels are capable of a transatlantic crossing that takes 5½ days instead of 7 to 10, and a transpacific crossing that takes 6 to 7 days instead of 9 to 12.

# U.S. Exports Of Cotton to Greece Expand Substantially

GREEK IMPORTS of U.S. cotton during the 1972–73 marketing year may reach 25,000 bales (480 lb. net)—about 4 times the level of a year earlier and the highest in many years.

Abnormally early and frequent rains and cool weather during the cotton harvesting season lowered both yields and quality of Greek cotton, accounting for the substantial increase in purchases of U.S. cotton. Total Greek cotton imports this year will expand by at least 50 percent, to around 120,000 bales, compared with last year.

Normally, Greece's domestic cotton production provides the industry with adequate supplies of high quality cotton, leaving over 50 percent of the annual output for export. Imports are usually limited to special requirements not produced in Greece.

Purchases from the United States ordinarily are of shorter staple cottons not normally produced domestically in sufficient quantities. Other imports, most of which are from Turkey, are cottons of lower grades.

In addition to reducing 1972 crop yields, rains lowered the average grades, changing the trade patterns of both exports and imports. Although Greece's imports from the United States in recent years have been limited largely to $1\frac{1}{16}$-inch-staple length, from Memphis/New Orleans, over 80 percent of this year's purchases are from California/Arizona and mostly of $1\frac{3}{32}$-inch staple. (Greek requirements for the latter cottons are ordinarily adequately supplied from domestic production).

The relatively higher prices of the Memphis/New Orleans cottons reportedly also contributed to the decision to purchase larger quantities of the California/Arizona production.

This year's purchases of extra-long-staple lengths from Egypt and those of the lower grades from Turkey, represent the normal purchases from these two countries. Smaller quantities from Pakistan were of low grades and short staples.

The major motivation for buying good quality U.S. cotton this year was the need to secure early the quantities required to manufacture the yarns being sold at ever-expanding rates to Western Europe, especially Germany. Total yarn exports have been recently increased by about 50 percent annually and account for a substantial share of the increasing domestic utilization of cotton. Yarns exports are encouraged by Governmental financial aid.

Both Government and industry anticipate further substantial expansion. About 100,000 new spindles will be installed in calendar 1973, increasing cotton utilization capacity by about 15 percent. This upward trend will continue until the present number of spindles has about doubled. Utilization of manmade fibers is insignificant and does not play a major role in influencing the industry.

The sharp rise in international cotton prices in late 1972 reportedly will not motivate growers to expand 1973 acreage. In fact, deterioration in grades, higher production costs—including harvesting—and poorer average yields probably resulted in reduced net incomes to cotton farmers in 1972, compared with a year earlier. In addition, the Government hiked the prices of sugarbeets, which are also grown in some cotton-producing areas.

Because of the expanding availability of irrigated land suitable for cotton production, potential exists for a resumption of the upward trend in production, if sufficient mechanical pickers are imported to offset the declining availability of hand pickers.

*Greek cotton crops (above) suffered from rain and cool weather during harvest, lowering both yields and quality, and necessitating record imports of U.S. cotton this year.*

The Government could expand both cotton production and exports of cotton yarns and textiles if it chooses to do so. For calendar 1973, however, production subsidies have been reduced rather than increased.

Assuming a normal growing and harvesting season during 1973—and therefore average quality and yields—imports and utilization of U.S. cotton by the domestic milling industry could decline, since an important share of this year's increase was due to the lower quality of the 1972 domestic crop. Over the long term, however, there could be a small expanding demand for U.S. cotton as the industry grows.

—By James C. Frink
*U.S. Agricultural Attaché, Athens*

## U.S. PARTICIPATION IN BELGIAN FAIR POINTS TO NEED FOR PRODUCT CHANGES, SALES REPS

U.S. participation in the Food Business-HORESCA Trade Fair in Brussels, January 14–18, 1973, has indicated that changes in product labeling and contents may enable exporters to target their products more accurately to the Belgian market, while fair exhibitors will gain more immediate and concrete sales benefits by having sales representatives present.

One hundred food items displayed in the "New Products" section of the January trade fair and in the International Foodservice Manufacturers' Association (IFMA) booth were evaluated by Belgian taste-test panels to determine their potential acceptability by consumers. The testing was done by six-member groups, composed of decision makers of the food import, wholesale grocery, food distribution, and similar trade panels, carefully selected and matched with products according to interests. Panels sampled and discussed a maximum of eight products per session.

Handled by a Belgian firm under contract with the Foreign Agricultural Service, the tests were to elicit attitudes and opinions of the participants concerning product flavor, their possible adoption by Belgian consumers, and their marketability, and to recommend changes needed to improve their acceptance or market potential.

Conclusions reached as a result of the tests show that the Belgians, like most other Europeans, do not want artificial colors or chemicals in their foods, that labels on food products should be printed in the national languages—Flemish (or Dutch) and French for the Belgian market—and that weights, measures, and temperatures should be changed to the locally used system.

In Belgium and other European countries, the metric system would have to be used. In other parts of the world, there are measurement systems less familiar to U.S. businessmen.

A report, based on the tests, gives a full individual account for each of the 100 products tested. Twenty-four products were particularly acceptable to the Belgian taste and hold good promise for gaining a place in the market. On the other hand, the panels reported that 31 products were not adapted to the Belgian market at least in their present form. Prospects for the remainder were marginal.

American food companies whose products were tested in Brussels will be sent a full report of the results of the panel test.

One hundred and six American food firms exhibited over 1,000 products at the January trade fair, ranging from consumer-pack items to institutional packs for mass feeding operations. The "new products" were featured in special areas.

Prospective sales resulting from contacts made at the trade fair are expected to total over $1 million over the next 12 months.

Fifty-two of the firms, some of them new to the Belgian market, had individual exhibit areas large enough to accommodate a salesman. They report the investment paid off. One exhibitor capitalized on contacts made at the fair and visited France, Germany, the Netherlands, and the United Kingdom afterward. He reports strong interest in his products from these countries.

Another exhibitor sent four company representatives to visit nearly all of Europe. He now reports orders for over six containerloads of products. A third one reported the appointment of three new agents in France, Spain and Mexico.

Sales results reported by the firms participating clearly indicate the effectiveness of having sales representatives present who can quote prices and make commitments. This gives strong support to the argument that all products displayed at such an event should be accompanied by an executive who has these powers.

—GALEN YATES
Export Trade Service Division
Foreign Agricultural Service

## USSR Developing New Protein Sources

The Soviet Union is attempting to boost the protein content of some of its feed crops through breeding programs. One is a lupine called the Kievskiy Mutant, which, in experimental plots in the northern Ukraine, is said to have produced a green forage ranging upward from zero to three-fourths more than other varieties and a seed output generally ranging from three to five times as great.

During 1971 and 1972, the USSR apparently continued experimental plantings of the mutant and made a few commercial plantings. On March 1, 1973, Tass News Agency reported that farms growing the new variety had harvested up to 2 metric tons of seed per acre, or 20 to 24 tons of green forage per acre. On a per-acre basis, the new lupine is said by Soviet scientists to outyield soybeans in protein.

The Soviet Ministry of Agriculture plans to sow about 123,500 acres to the Kievskiy Mutant in 1973. In 1969—the most recent year for which firm data are available—a total of 1.4 million acres were planted in the Soviet Union to all lupines.

The seeds of most varieties of lupine are toxic to animals because of the presence of alkaloids, although some yellow and blue sweet lupines have little or no toxicity. Kievskiy Mutant is a sweet white lupine. Information on this variety to date makes no mention of toxicity levels.

The new lupine variety may prove to be a valuable source of feed protein in the USSR; however, insufficient information is now available for a complete evaluation. Experience with development of new crops in the United States suggests that some time will be required for any significant expansion of this new variety.

Soviet scientists are also attempting to develop high-lysine barley and corn, improve yields of feed peas, and develop soybeans adapted to the European USSR. Synthetic proteins, such as petroleum-based yeasts, are also in limited commercial production.

# CROPS AND MARKETS

## FATS, OILS, AND OILSEEDS

### Norway's Soybean Imports Growing

Norway's oilseed imports for crushing purposes approximated 275,000 metric tons in calendar 1972 and have been expanding at an average rate of 25,000 tons per year during the past 5 years. Soybean imports at about 235,000 tons in 1972 accounted for more than 85 percent of the total.

Oilseed imports this year and beyond are expected to continue to grow significantly reflecting a substantial expansion in crushing capacity to an estimated annual volume of 400,000 to 450,000 tons.

### Australia's 1972–73 Oilseed Area Declines

Combined plantings of oilseeds in Australia reportedly declined to about 800,000 acres in 1972–73, compared with about 1.5 million acres in 1971–72. The acreage decline, largely sunflowerseed and rapeseed, was sharply below planting intentions and is expected to result in a reduction in oilseed production from the 330,000 long tons produced in 1972 to about the previous year's volume of approximately 220,000 tons. The prospective shortfall may result in reduced exports—chiefly of sunflowerseed.

## LIVESTOCK AND MEAT PRODUCTS

### U.K. Beef and Milk Marketing Year Deferred

Because the Council of Ministers of the European Community has delayed fixing Community agricultural prices for 1973–74 for 1 month, the United Kingdom has deferred from April 1 until May 1, the start of the marketing year for beef and milk products in the United Kingdom. The first adjustment in the U.K. guide prices for cattle and calves and the U.K. intervention price for butter will also be deferred until that date.

### Smuggled Meat Seen Threat to European Livestock

With beef prices at record levels, smuggling of meat into Europe from countries where animal disease is common could endanger large numbers of European livestock, according to reports received by the Food and Agricultural Organization in Rome.

"There is still evidence that meat is coming into Europe under false certification," Gwyn Beynon, chairman of FAO's European Commission for the Control of Foot-and-Mouth Disease, told the Commission's 20th session at FAO headquarters. "And in view of the price structure we shall have a continuing problem with smuggling."

The United Kingdom's chief veterinary officer, Alex C. L. Brown reported "strong circumstantial evidence" that illegally imported pork touched off an outbreak of swine vesicular disease in Great Britain last November. There have been 86 outbreaks since the first incident was diagnosed, 42,000 pigs have been destroyed, and the campaign against the disease has already cost about $250 million. However, with only four new outbreaks reported in 2 previous weeks, Dr. Brown expressed the hope that the disease was being brought under control.

The swine disease produces symptoms clinically indistinguishable from foot-and-mouth disease. It has also appeared recently in France, Austria, Italy, and Poland. Dr. Brown said he suspected that swine vesicular disease is more widespread in Europe than is generally known. Many cases in the United Kingdom were not suspected by farmers but were discovered through far-ranging investigation by the country's veterinary service.

### Mexico and Guatemala Limit Meat Exports

In 1972 Mexico exported 81.9 million pounds of beef and veal to the United States. Recently in order to insure adequate domestic beef supplies, Mexico began requiring exporting plants to sell domestically 1 pound of beef for each pound exported. Mexico has also begun issuing export permits for boneless beef on a weekly basis. In the past, exporting plants received yearly export quotas at the beginning of the calendar year.

Because of meat and live cattle price pressures, Guatemala ordered a 25-percent reduction in beef exports for April. Guatemala's three export plants stopped operations from April 15 to May 15. Government officials have stated however that the 40.2 million pounds of beef authorized for export in 1973 will be exported. Guatemala exported 36.9 million pounds of beef and veal to the United States in 1972.

## TOBACCO

### Turkish Exporters React To Tobacco Demand

The Aegean Tobacco Market, which accounts for 69 percent of Turkey's oriental tobacco sales, opened January 29 for 4 days of heavy trading. Private merchants, reacting to actual and anticipated increases in demand, as well as the favorable export dollar rate of TL14=US$1, purchased 67 percent of the crop (120,000 metric tons) versus 45 percent in 1971. In so doing they bid the top export price up to 59 U.S. cents per pound. The average price rose from 35 U.S. cents per pound in 1971 to 44 U.S. cents per pound in 1972.

The domestic demand for filter cigarettes is taxing the Turkish Tobacco Monopoly's production capacity. In 1972, sales increased by 5 percent while production slipped by 4 percent. This increased domestic demand, coupled with the higher exports and reduced purchases, has led to a reduction in the Monopoly's traditionally large stocks.

Reports from the Black Sea market indicate that quality is mixed due to blue mold damage.

Area restrictions will be applied to the 1973 crop but informed sources indicate that producers will respond more to the higher prices with an increase in expected acreage.

### Greater Irish Cigarette Output Spurs Exports

Ireland's cigarette production in 1972 increased 11 percent to 30 million pounds, while cigarette exports nearly doubled. The production of other products increased only slightly as exports of pipe tobacco (Ireland's main tobacco product) rose by only 2 percent.

Per capita tobacco consumption continued to fall as Irish smokers switched to little cigars and filter tip cigarettes. Practically all little cigars are imported, accounting for the 37-percent increase in this import figure. If the current consumption rate is sustained, Irish manufacturers will probably begin production of this type of cigar.

Imports of raw tobacco were up 34 percent; U.S. imports increased by 75 percent to 11.5 million pounds. The dramatic rise in U.S. imports does not denote a trend but rather reflects manufacturers replenishing stocks depleted during the 1971 U.S. dock strike. The United States now enjoys a 74-percent share of the unmanufactured tobacco market. This position will probably slip as Ireland adopts EC tariff rates and manufacturers press their search for cheaper flue-cured.

## SUGAR AND TROPICAL PRODUCTS

### Record African Tea Harvest in 1972

Reflecting favorable growing conditions and expanded tea acreage, African tea production in 1972 reached an all-time high of nearly 150,000 metric tons, up 27 percent over the 1971 outturn of 118,000 tons. Record crops were harvested by most all producing countries of this area.

Kenya produced a crop of 53,322 tons, compared with 36,290 tons in 1971, and Uganda's crop reached 23,400 tons, up 30 percent from production of 17,966 tons a year earlier.

Production data in metric tons for most of the other major African producers with 1971 figures in parentheses were: Malawi, 20,682 (18,615); Mozambique, 18,678 (16,536); Tanzania, 12,706 (10,457); and Mauritius, 4,700 (4,100).

## FRUITS, NUTS, AND VEGETABLES

### Processing Subsidies For Italian Oranges

Since the 1969–70 season, the European Community has granted subsidies to processors of Italian oranges to encourage processing of those varieties (specifically Biondo commune oranges) which can be disposed of on commercial fresh markets only at very low prices.

These subsidies are paid to each processor for oranges processed in excess of the average tonnage purchased for processing during the three preceding seasons. EC subsidization was originally scheduled to apply only until June 1, 1974. By that date it was hoped that Italian orange groves would have been converted to varieties more suitable for sale on commercial fresh markets.

However, implementation of the medium-term measures aimed in part at improving the varietal structure of Italian orange groves is not proceeding on schedule. The EC, therefore, has decided to abolish the deadline date for the processing subsidies.

Commission Regulation No. 141/73 establishes the amounts of the processing subsidies, and the minimum prices processors must pay to producers to be eligible for the subsidies, in the 1972–73 season.

These minimum prices and subsidies for 1972–73 are contrasted in the accompanying table with those for 1971–72.

The amount of the subsidy was established on the basis of the difference between the minimum price to be paid producers and 80 percent of the actual price level prevailing over the three preceding seasons (1969–70/1971–72).

ITALIAN ORANGES: EC PROCESSING SUBSIDIES AND MINIMUM PRICES

[In EC units of account per 100 kilograms[1]]

| Quality class | Minimum price | | Processing subsidy | |
|---|---|---|---|---|
| | 1971–72 | 1972–73 | 1971–72 | 1972–73 |
| I | 5.4 | 5.5 | 2.6 | 2.6 |
| II | 4.3 | 4.4 | 1.5 | 1.5 |
| III (or mixed) | 3.7 | 3.8 | .9 | .9 |

[1] 100 kilograms=220.4 lb.

### Section 332 Report On Asparagus Imports

In July 1972, the House Ways and Means Committee directed the U.S. Tariff Commission to undertake a Section 332 investigation (Tariff Act of 1930) of the competitive relationship between domestic and imported asparagus, fresh and processed. On April 10, the Commission released a report of its findings.

The report indicated that although imports have expanded rapidly in recent years, they still continue at a relatively low level (in terms of U.S. consumption, fresh imports represented 9 percent in 1972; canned, 7 percent; and frozen, 11 percent). The Commission's report, however, indicated that further growth in foreign production is likely, particularly in Mexico, with the U.S. market continuing as a major target. The Commission further noted that despite increased imports in recent years, prices received by U.S. growers and processors were significantly higher in 1971 and 1972 than in earlier years.

### Australia's Apple and Pear Crop Estimates Lowered

Good rainfall in most pome fruit-growing districts in the Eastern States of Australia during February relieved what was developing into a serious situation. However, 1972–73 apple and pear crops are expected to be lighter than indicated in preliminary estimates.

Apple and pear crops in Tasmania, New South Wales, and Victoria are expected to be smaller than first indicated. Pear crops in South Australia are also lighter than indicated in earlier forecasts.

The New South Wales apple forecast now is for a total crop half a million bushels less than the preliminary forecast. The forecast is now set at 5.7 million bushels compared with the earlier estimate of 6,218,000 bushels. The New South Wales pear crop is now forecast at 899,000 bushels, a drop of 135,000 bushels from the earlier quote.

The Tasmanian apple crop is now estimated at 6.2 million bushels of which 4.7 million bushels are considered packable. This is down 50,000 bushels from the earlier quotation. The total pear crop is estimated at 306,000 bushels of which 230,000 bushels are packable.

The South Australian apple crop estimate has now been placed at 1.5 million bushels against the earlier forecast of 1,472,000 bushels. The pear crop is estimated at 577,000 bushels, a drop of 85,000 bushels on the previous figure.

The Western Australian apple crop is set at 2,965,000 bushels, a rise of 93,000 bushels, compared with the earlier figure of 2,872,000 bushels. The pear crop estimate has remained the same at 200,500 bushels.

In Victoria there will be a slight reduction in the apple and pear yield due to sunburn and poor sizing.

Tasmania has arranged for the shipment of 3.9 million bushels of fruit overseas this season, an increase from the 3,060,000 estimated a few weeks ago.

# GRAINS, FEEDS, PULSES, AND SEEDS

## Grain Exports and Transportation Trends: Week Ending April 27

Weekly grain inspections for export and grain moving in inland transportation for the week of April 27 and the previous week were:

| Item | Week ending | Previous week | Weekly average | Weekly average quarter |
|---|---|---|---|---|
| | *1,000 metric tons* | *1,000 metric tons* | *1,000 metric tons* | *1,000 metric tons* |
| Weekly inspections for export: | | | | |
| Wheat | 838 | 663 | 589 | 637 |
| Feedgrains | 519 | 611 | 688 | 690 |
| Soybeans | 327 | 248 | 333 | 327 |
| Total | 1,684 | 1,522 | 1,610 | 1,654 |
| Inland transportation: | | | | |
| Barge shipments of grain | 399 | 363 | 495 | 495 |
| | *Number* | *Number* | *Number* | *Number* |
| Railcar loadings of grain | 29,696 | 28,070 | 30,404 | 32,271 |

## Australia's Short Crop May Cause Cut in Seed Exports

The Australian Seeds Industry Association recently indicated that because of short crops following this year's drought, little pasture seed will be available for export, and some varieties will have to be imported because of the resurgence in pasture development owing to higher wool and beef prices in world markets.

The association has appealed to growers for maximum seed production in 1973–74, but the current shortage may enable U.S. exporters to boost sales in Australia, particularly of phalaris and cocksfoot grasses.

Although the association has called several times for maximum output of temperate pasture seeds, unfavorable conditions prevented this, and supplies are so limited that Australia is unable to service its export markets. In addition, the carryover of seed into next year will be negligible or well below the local stock-safety level in some varieties.

The association points out, however, that if favorable conditions permit maximum production, prices may not remain at present high levels.

## Rotterdam Grain Prices and Levies

Current offer prices for imported grain at Rotterdam, the Netherlands, compared with a week earlier and a year ago:

| Item | May 8 | Change from previous week | A year ago |
|---|---|---|---|
| Wheat: | *Dol. per bu.* | *Cents per bu.* | *Dol. per bu.* |
| Canadian No. 1 CWRS-14 | 3.28 | +5 | 1.99 |
| USSR SKS-14 | (1) | (1) | 1.85 |
| Australian FAQ [2] | (1) | (1) | (1) |
| U.S. No. 2 Dark Northern Spring: | | | |
| 14 percent | 2.97 | +10 | 1.89 |
| 15 percent | 3.08 | +18 | 1.97 |
| U.S. No. 2 Hard Winter: | | | |
| 13.5 percent | 2.90 | +13 | 1.82 |
| No. 3 Hard Amber Durum | 3.24 | +11 | 1.84 |
| Argentine | (1) | (1) | (1) |
| U.S. No. 2 Soft Red Winter | (1) | (1) | (1) |
| Feedgrains: | | | |
| U.S. No. 3 Yellow corn | 2.22 | +15 | 1.47 |
| Argentine Plate corn | 2.32 | +10 | 1.73 |
| U.S. No. 2 sorghum | 2.16 | +8 | 1.47 |
| Argentine-Granifero sorghum | 2.15 | +9 | 1.48 |
| U.S. No. 3 Feed barley | 1.78 | −7 | 1.19 |
| Soybeans: | | | |
| U.S. No. 2 Yellow | 8.57 | +29 | 3.78 |
| EC import levies: | | | |
| Wheat [3] | [4] 1.51 | −1 | 1.99 |
| Corn [5] | [4] .95 | −21 | 1.30 |
| Sorghum [5] | [4] 1.05 | −8 | 1.31 |

[1] Not quoted.
[2] Basis c.i.f. Tilbury, England.
[3] Durum has a separate levy.
[4] Effective October 14, 1971, validity of licenses with levies fixed in advance is a maximum of 30 days.
[5] Italian levies are 23 cents a bu. lower than those of other EC countries.

Note.—Price basis 30- to 60-day delivery.

### New Foreign Agriculture Circulars

- West European Grain Prospects Good (FG–6–73)

Single copies may be obtained free from the Foreign Agricultural Service, U.S. Department of Agriculture, Washington, D.C. 20250, Rm. 5918 S.; Tel.: 202–447–7937.

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## U.S. Almond Exports Expected To Expand

*(Continued from page 5)*

Not only must primary grades of shelled almonds be ready early, the demand for special processing—blanched, sliced, slivered, diced, split, and roasted almonds—grows each year as more and more buyers prefer to receive their requirements in a ready-to-use form rather than as a raw material.

Both in 1972 and the previous year, sales were restricted because the crops were not large enough to meet all the demand, either for domestic consumption or for export. The 1971 crop is a rather convincing example of what the almond industry may anticipate by 1975. In the 12-month period ending June 30, 1972, the industry exported 90 million pounds of almonds, shelled basis, or the equivalent of 58 percent of the total crop.

I believe the California almond industry can look ahead with a certain amount of optimism, tempered with the hope that the planting of new orchards will not be overdone, for there appears to be enough acreage devoted to almond production in California at the present time to supply all the demand.

## British Honduran Beef Prospects

*(Continued from page 6)*

30,000 acres under cultivation, but divided into farm units of probably not more than 10,000 acres each.

Land clearance is also a major concern and objective of an American tropical products company, which bought 25,000 acres in 1968. After 5 year of delays, the company is ready to begin operations. Soon there will be prefabricated housing, laboratories, and service buildings. Mangoes, breadfruit, custard apples, soursops, cashews, and Santa Gertrudis beef will be produced for foreign markets.

And U.S. breeding cattle may be expected to find their way southward to help build up these various Belizean beef herds.

## Netherlands Food Promoters To Focus On Expansion of EC Markets in 1973

Dutch agricultural promoters will concentrate most of their activities in the European Community in 1973 in an effort to increase food sales there. About 80 percent of a promotional budget of some $14.3 million is slated to be spent for this purpose by Government agencies and various trade organizations. West Germany, the United Kingdom, and France will receive most attention, but moderate efforts will also be made to boost sales in the United States and Sweden.

In 1972, the Dutch, in addition to standard food promotion activities—trade fairs, special food weeks, distribution of point-of-purchase items, and scheduling visits by trade teams—used an approach that is seldom employed. They utilized a seven-car exposition train to visit 12 towns and cities in the United Kingdom.

The train, which also served as an information center for trade and tourism, promoted Dutch agricultural products during 3 weeks in May in cities such as London and Liverpool, and in towns such as Norwich and Brighton. Manning the train were representatives of the Dutch trade (or their British representatives), trade groups, and the Dutch Government.



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